

NOTES ON NORTH AMERICAN CERAMBYCIDAE (COLEOPTERA)¹

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ABSTRACT: New distributional, bionomic or host plant data is presented for species in the following genera: *Callipogonius*, *Eburia*, *Elaphidion*, *Hypexilis*, *Mecas*, *Megacyllene*, *Nesostizocera*, *Obrium*, *Piezocera*, *Ataxia* and *Lochmaeocles*. Characters for the separation of *Elaphidion cryptum* Linsley and *E. irroratum* (Linnaeus) are enumerated. *Xeranoplium gracile* Linsley is placed as a junior synonym of *X. tricallosum* (Knull). *Heterops dimidiata* (Chevrolat) and *Eupogonius annulicornis* Fisher are recorded from North America for the first time. Corrigenda to a previous paper are given.

DESCRIPTORS: Cerambycidae, ecology, taxonomy, host plants, distribution, larvae, Arizona, Texas, Florida.

In an earlier paper, Hovore and Giesbert (1976) presented new ecological and distributional information for 63 species of Cerambycidae from western North America. The following brief accounts, based primarily upon the authors' recent field observations and collections in southern Arizona, southern Texas and the Florida Keys, are supplemental to that paper.

Specimens accumulated during these investigations are in the collections of the authors unless otherwise indicated. Miscellaneous corrigenda to our 1976 paper follow the species accounts.

Callipogonius cornutus (Linsley)

Linsley and Martin (1933) recorded this cryptically-colored lamiine as "beaten from dead *Salix*", and later, Linsley (1935), in his revision of the Pogonocherini, stated that *Salix* was the host, based upon the collection of numerous adults from dead and dying willow branches. We have confirmed *Salix* as the larval host by rearing numerous specimens from dead willow branches collected in the Sabal Palm Grove Sanctuary near Brownsville, Cameron County, Texas. Larvae tunnel parallel with the grain in the heartwood of small to medium-sized (20 – 40 mm dia.) branches. Pupation occurs in an oval cell beneath the bark or in the sapwood. Most individuals apparently require only one year to complete development, although adults continued to emerge in decreasing numbers for three years following branch

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collection. *Ataxia crypta* (Say), *Lochmaeocles c. cornuticeps* (Schaeffer) and the Buprestid *Dicerca lurida* (Fabricius) also emerged from the dead willow branches.

Eburia stigmatica Chevrolat and *Eburia mutica* LeConte

Linsley and Martin (1933) and Vogt (1949) collected adults of these species from beneath loose bark of *Salix*, *Acacia* and *Celtis* in southern Texas. F.T. Hovore and E.F. Giesbert collected adults and pupae of both species from pupal cells in the sound, dry heartwood of dead *Celtis* near Brownsville.

Elaphidion cryptum Linsley and *Elaphidion irroratum* (Linnaeus)

Elaphidion cryptum, described in 1963 from 5 females collected on Palmetto Key, Monroe County, Florida, was encountered in large numbers on Key Largo in April. Adults were collected at night from blossoms on freshly cut, down-hanging branches of wild tamarind (*Lysiloma bahamense* Benth.). A few specimens of both sexes were also attracted to mercury vapor and ultraviolet lights. *Elaphidion irroratum*, with which *cryptum* is frequently confused in collections, was also taken at light and on the *Lysiloma* blossoms.

Males of *E. cryptum* differ obviously from both sexes of *irroratum* by their more narrow, tapering form, bispinose 3rd and 4th antennal segments, absence of pale pubescence on the sides of the pronotum on the apical one-fourth, and feebly impressed, closely punctate prosternum. Males of both species are also easily separated by the much shorter antennae in *cryptum*, surpassing the elytral apices by little more than one segment. Sexual differences within *cryptum* include the narrower form of the male, with the fifth abdominal tergite distinctly emarginate (subtruncate in female) and the pronotal sides finely rugulose (coarsely, closely punctate in female).

Eupogonius annulicornis Fisher and *Heterops dimidiata* (Chevrolat)

Single specimens of both these longhorns were collected at mercury vapor light on Key Largo in May, 1975, by E.F. Giesbert. R.H. Turnbow Jr., (pers. comm.) beat two specimens of *E. annulicornis* and three of *H. dimidiata* from foliage of gumbo limbo (*Bursera simarubra* (L.) Sarg.) in May, 1977. A single specimen of *H. dimidiata* from Key Largo (Weems coll.) is also present in the Knull Collection, Field Museum of Natural History, Chicago. In addition to representing the first North American records for both species, *H. dimidiatus* is the first known North American member of the tribe Heteropsini.

Zayas (1975) records *H. dimidiata* as being active diurnally and feeding upon "la pulpa de las semillas de Anga (*Penthecolobius dulce*)." No biological information is presented for *E. annulicornis* by either Zayas or Fisher (1926). Multiple collections of both species would suggest that the West Indian *Heterops* and rare Cuban *Eupogonius* are established in the Florida Keys.

***Hypexilis pallida* Horn**

Linsley (1962) recorded this species only as having been collected at light in southern Texas. Several specimens were beaten from *Salix* near Brownsville, and F.T. Hovore beat a single female from Cedar Elm (*Ulmus crassifolia* Nutt.) at Bentsen-Rio Grande Valley State Park, Hidalgo County. It has also been taken at light in Green Gulch and Chisos Basin, Big Bend National Park, Brewster County. A single specimen in the California Insect Survey Collection, UC Berkeley, is from: Mexico, Nuevo Leon, 15 mi W Linares, VIII-27-1969, J. Haddock, J. Doyen collectors.

***Mecas linsleyi* Knull**

Originally described in 1975 from specimens collected on "Mexican devilweed" (*Aster spinosus* Benth.) at Bentsen-Rio Grande Valley State Park, this species' distribution is now known to include the southern Gulf-coast region of Texas. Numerous adults were beaten from *A. spinosus* in the Woodland-Spiny aster and Spiny aster-Longtom plant communities of Welder Wildlife Refuge, San Patricio County (May, 1977), and from scattered small stands of *Aster* at Anzalduas Park, Hidalgo County (May, 1976).

***Mecas (Dylobolus) rotundicollis* (Thomson)**

Chemsak and Linsley (1973) recorded *M. rotundicollis* as having been collected from flowers of *Guardiola* and *Eysenhardtia* in Mexico. Over 75 specimens of this attractive Lampyrid-mimicking longhorn were collected in May, 1977, from stems and foliage of Frostweed (*Verbescina microptera* D.C.) growing along the margins of a Bunchgrass-Annual forb plant community at Welder Wildlife Refuge. Another longhorn, *Hemierana marginata* (Fabricius) was also common on the Frostweed at this locality.

***Megacyllene robusta* Linsley and Chemsak**

This large clytine is extremely rare in collections, and nothing has heretofore been published concerning its habits. Recently, a group of entomology students from California State University, San Jose, and A.E. Lewis collected a few specimens from *Haplopappus* blossoms and stems and foliage of mesquite (*Prosopis glandulosa* Torr.), 2 mi S Willcox, Cochise County, Arizona. Subsequently, in early October 1976 and 1977, F.T. Hovore and E.F. Giesbert collected large series of adults and observed the habits of this species on mesquite along the northern margin of Willcox Dry Lake.

Females of *M. robusta* oviposit in bark crevices near the bases of smaller trees (10 – 15 cm dia.) or on large lateral branches of older trees. Larvae feed beneath the bark, excavating broad, meandering galleries packed with fine, grainy frass and fecula. The pupal cell is constructed in the sapwood or heartwood, and is plugged with coarse shredded frass which is occasionally

visible externally. Fresh emergence holes are conspicuous in October; holes from previous years are evident as oval rings of scar tissue.

Megacyllene antennata (White), *Oncideres rhodosticta* Bates and the Buprestid *Chrysobothris octocola* LeConte were also present on the mesquite trees.

Nesostizocera floridana (Linsley)

Linsley (1949) described and later (1963) recharacterized this species from two females labelled "Marco, Florida" (Marco Island, Collier County). A.E. Lewis and the authors took series of both sexes at lights in April and May on Sanibel Island, Lee County. R.L. Penrose and F.T. Hovore observed adults of *N. floridana* walking, mating and ovipositing at night on dead limbs of Florida privet (*Forestiera segregata* var. *segregata* (Jacq.) Klug & Urban) in a thicket at the south end of the island. Numerous adults have subsequently been reared from this host.

Larvae mine extensively in the cambium and inner bark surface, packing their galleries with fine, grainy fecula and light, shredded frass. The simple, elongate pupal cell is constructed parallel with the grain in the heartwood; the exit hole is plugged to the inner bark surface with a wad of shredded frass. Adults emerged from infested wood for two seasons.

Males of *N. floridana* differ from females by their more slender, tapering form and longer antennae, surpassing the elytral apices by $3\frac{1}{2}$ segments.

Obrium mozinnae Linell

This diminutive orange and black Texan species was originally described (1896) from a pair of specimens beaten from *Mozinna* (= *Jathropa*) *spatulata*. Linsley and Martin (1933) took it at light and by beating *Acacia*; Vogt (1949) beat it from the flowers and foliage of Brasil (*Condalia obovata* Hook.). The authors beat and reared *O. mozinnae* from tepehuaje (*Leucaena pulverulenta* (Schlect.) Benth.) branches which had been girdled and killed by *Oncideres pustulata* LeConte. A single specimen in the UC Berkeley Collection from Brownsville (H.S. Barber coll.) is labelled "ex. Huisache" (= *Acacia farnesiana* (L.) Willd.).

Piezocera serraticollis Linell

Numerous specimens of this apparently rare species were beaten from dead and dying spiny hackberry (*Celtis spinosa* Spreng., var. *pallida* Torr.) in the Sabal Palm Grove Sanctuary, May 1977. Occasional individuals were also collected from decadent branches of Texas ebony (*Pithecellobium flexicaule* (Benth.) Coulter), sugar hackberry (*C. laevigata* Willd.) and blossoms of tepehuaje.

Wickham (1898) recorded this species as inhabiting "thickets" in the lower Rio Grande Valley; Townsend (1902) took a single specimen by "beating in

palmetto jungle at Santo Tomas, June 16th." Neither Linsley (1963), nor Martins (1976) list any host associations for *P. serraticollis*.

Xeranoplium gracile Linsley 57-16 = *Xeranoplium tricallosum* (Knull) 38-140, New synonymy.

Study of a long series of specimens from a number of localities in southern Arizona shows that the single character cited by Linsley (1962) for separation of these two taxa—the number of discal pronotal callosities (4 in *gracile*, 2 in *tricallosum*)—is evenly transitional between the two extremes, depending solely upon the degree of development of the basal pair of protuberances. By this synonymy, *X. tricallosum* becomes the type species of the genus.

Corrigenda

The following changes should be noted to a previous paper (Hovore and Giesbert, 1976) on western Cerambycidae: p. 350, *Stenodontes arizonicus* (Casey): information given for this species refers in part to an undescribed species of *Stenodontes* (Subg. *Malodon*) which breeds in living oak trees. *S. arizonicus* apparently utilizes dead wood. Host records of "*Condalia*" for *Chrotoma dunniana* Casey (p. 354) and *Anelaphus inflaticollis* Chemsak (p. 355) were based upon mis-identifications of boxthorn (*Lycium* spp.). *Parevander xanthomelas* (Guerin) and *Mannophorus laetus* LeConte were taken on flowers of *Viguiera stenoloba* Blake, not *Verbescina encilioides*.

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ERRATUM

In the paper "A New and Apparently Extinct Katydid from Antioch Sand Dunes (Orthoptera: Tettigoniidae)" by D.C.F. Rentz in *Entomological News* 88: 9 & 10: 241-245, November & December, 1977, due to a printing error, there was an omission from the second line of the species description on page 242. That line should have read "fornia, 1 July 1937. E.S. Ross collector. Holotype deposited in California Academy of". This line was intact on the proof submitted to and approved by the author but most of it was lost at the printer before final negatives were made. Both the printer and the editor apologize for this error. New reprints are being furnished gratis to the author, and anyone wishing a complete and correct reprint of this paper should write to D.C.F. Rentz, Curator of Orthoptera, Australian National Insect Collection, Division of Entomology, Commonwealth Scientific and Industrial Organization (CSIRO) P.O. Box 1700, Canberra City, A.C.T. 2601, Australia.